• PRINTER RUSH • (PTO ASSISTANCE)

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C-463 DIV 4

PATENT APPLICATION

WATER COMPATIBLE ENERGY CURABLE COMPOSITIONS CONTAINING MALEMIDE DERIVATIVES

BACKGROUND OF INVENTION

This application is a Divisional of United States Patent Application

No. 09/831,688, entitled "Water Compatible Energy Curable Compositions

Containing Maleimide Derivatives", now pending.

37/04 ?CT/US 98/24300 HILL Nov. 14,1458

Field of the Invention

The present invention relates to active water compatible energy curable compositions containing a maleimide derivative, useful for preparing various coatings, printing inks, surface finishes, moldings, laminated plates, adhesives, and binders. More specifically, the present invention relates to active water compatible energy curable compositions, which can be cured in the absence of a photoinitiator with an irradiation source of practical intensity and energy value.

Description of Related Art

An active energy curable composition polymerized under irradiation of active energy such as thermal energy, ultraviolet light, visible light, and the like, has an advantage of being rapidly cured. Active energy curable compositions are widely used as paints, inks, adhesives, coatings, and the like. However, conventional ultraviolet active energy curable compositions cannot initiate polymerization alone upon irradiation with an energy source; it is therefore necessary to use a photoinitiator. When photoinitiators are used in large quantities, curing progresses rapidly, which encourages the use of large quantities of photoinitiator.

Photoinitator compounds having an aromatic ring are used in general because they effectively absorb ultraviolet light. However, these compounds cause problems such as the yellowing of the cured materials



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

Bib Data Sheet

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APPLICANTS										
David Anthony Biro, Rockaway, NJ; Mikhail Laksin, Scotch Plains, NJ; Yoshinobu Sakurai, Sakura-shi, JAPAN; Hisatomo Yonehara, Sakura-shi, JAPAN; Katsuji Takahashi, Sakura-shi, JAPAN;						· .				
 ** CONTINUING	DAT	A *******	*							
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Sidney Persley, Esquire										
Sun Chemical Corporation										
222 Bridge Plaza South										
Fort Lee ,NJ 07024										
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